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EXAMINER VUONG, QUOCHIEU B				
ART UNIT 2618		PAPER NUMBER		
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

09/826,251

**Applicant(s)**

SAINT-HILAIRE ET AL.

**Examiner**

Quochien B. Vuong

**Art Unit**

2618

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 2 and 4-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 4-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114 was filed in this application after a decision by the Board of Patent Appeals and Interferences, but before the filing of a Notice of Appeal to the Court of Appeals for the Federal Circuit or the commencement of a civil action. Since this application is eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 12/03/2007 has been entered.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1, 2, and 4-30 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 2, 4-20, 24 and 25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 2, and 4-10 recite the limitation "a distance between **the networks** greater than the first or the second range" in claim 1, line 7. There is insufficient antecedent basis for this limitation in the claim.

Claims 11-20 recite the limitation "a distance between **the networks** greater than the first or the second range" in claim 11, line 8. There is insufficient antecedent basis for this limitation in the claim.

Claims 15-20 recite the limitation "**said** non-radio frequency network" in claim 15, lines 3-4. There is insufficient antecedent basis for this limitation in the claim.

Claims 24-25 recite the limitation "**The system** of claim 21" in claim 24, line 1. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 4-12, 21-25, and 27-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Cannon et al. (US 6,650,871).

Regarding claim 1, Cannon et al. (figures 1 and 2) disclose a method comprising: enabling a plurality of first wireless devices (110, 112, and 114) in a first wireless

piconet (150) to communicate using a first wireless protocol having a first range (column 3, lines 39-46); enabling a plurality of second wireless devices (120, 122, and 124) in a second wireless piconet (160) to communicate using a second wireless protocol having a second range (column 3, lines 46-52); enabling the first and second wireless piconets to communicate with one another at a distance between the networks greater than the first or the second range (column 3, lines 33-38, and 53-57); said first wireless piconet including a third device (100a) that communicates using said first wireless protocol and a third wireless protocol different from said first wireless protocol, said third wireless protocol having a range greater than said first and second ranges (column 3, line 53 – column 4, line 50); and said second wireless piconet including a fourth wireless device (100b) that communicates using said second wireless protocol and said third wireless protocol (column 3, line 53 – column 4, line 50).

Regarding claim 2, Cannon et al. disclose the method of claim 1 including automatically enumerating a plurality of devices in a Bluetooth radio frequency network (column 3, lines 39-52).

Regarding claim 4, Cannon et al. disclose the method of claim 1 including communicating information about said first wireless piconet over a telephone network (column 3, lines 32-38 and column 4, lines 40-50).

Regarding claim 5, Cannon et al. disclose the method of claim 1 including enumerating a plurality of devices in a second wireless piconet (column 3, lines 46-52).

Regarding claim 6, Cannon et al. disclose the method of claim 5 including combining said first and second piconets into a combined radio frequency network (figures 1-3, column 5, line 54 – column 7, line 4) .

Regarding claim 7, Cannon et al. disclose the method of claim 6 including enabling any device in said first wireless piconet to communicate through a telephone call with any device in said second wireless piconet (using the cellular telephone within the piconet network 150 and another cellular telephone from the piconet network 160 or remote piconet network; column 4, lines 12-19).

Regarding claim 8, Cannon et al. disclose the method of claim 7 including transmitting data between said first and second wireless piconets through said telephone call at the same time that a voice communication is ongoing between a device in said first wireless piconet and a device in said second wireless piconet (using the cellular telephones between two piconet networks; column 4, line 12-19).

Regarding claim 9, Cannon et al. disclose the method of claim 8 including enumerating a cellular telephone as said third and fourth devices (the cellular telephones within two piconet networks; column 4, line 12-19)

Regarding claim 10, Cannon et al. disclose the method of claim 9 wherein one of said cellular telephones acts as a proxy for the devices in said first wireless piconet and the other of said cellular telephones acts as a proxy for the devices in said second wireless piconet (using the cellular telephones between two piconet networks; column 4, line 12-19).

Regarding claim 11, Cannon et al. (figures 1-2) disclose an article comprising a computer storage medium storing instructions that, if executed, enable a processor-based system to: enable a plurality of first wireless devices (110, 112, and 114) in a first wireless piconet (150) to communicate using a first wireless protocol having a first range (column 3, lines 39-46); enable a plurality of second wireless devices (120, 122, and 124) in a second wireless piconet (160) to communicate using a second wireless protocol having a second range (column 3, lines 46-52); enable the first and second wireless piconets to communicate with one another at a distance between the networks greater than the first or the second range (column 3, lines 33-38 and 53-57); said first wireless piconet including a third device (cellular telephone within the piconet network 150) that communicates using said first wireless protocol (Bluetooth) and a third wireless protocol (cellular) different from said first wireless protocol, said third wireless protocol having a range greater than said first and second ranges (column 3, line 53 – column 4, line 50); and said second wireless piconet including a fourth wireless device (another cellular telephone in piconet network 160 or a remote piconet network) that communicates using said second wireless protocol (Bluetooth, 900 MHz or 2.4 GHz) and said third wireless protocol (cellular) (column 3, line 53 – column 4, line 50).

Regarding claim 12, Cannon et al. disclose the article of claim 11 further storing instructions that enable the processor-based system to automatically enumerate a plurality of devices in a Bluetooth radio frequency network (column 3, lines 39-52).

Regarding claim 21, Cannon et al. disclose a device (cellular telephone; column 4, lines 12-19) comprising: a radio frequency receiver; a radio frequency transmitter (the

cellular telephone inherently comprises a radio receiver and transmitter); and a processor to communicate using a first wireless protocol with devices (base units 100a, computer, printer, PDA, television) in a first wireless piconet (150) having a first range (column 3, lines 39-46; and column 4, lines 12-19) and to communicate with devices (another cellular telephone from a nearby piconet network or a remote piconet network) in a second wireless piconet (160 or remote piconet network) using a second wireless protocol having a second range over a third wireless protocol having a range greater than said first or second range (column 3, line 53 – column 4, line 50).

Regarding claim 22, Cannon et al. disclose the device of claim 21 wherein said radio frequency transmitter includes a cellular radio frequency transmitter (column 4, lines 12-19; the cellular telephone inherently includes a cellular radio frequency transmitter).

Regarding claim 23, Cannon et al. disclose the device of claim 22 wherein said transmitter includes a Bluetooth transmitter (column 3, lines 39-52; and column 4, lines 12-19; the cellular telephone within the piconet network 150 inherently includes a Bluetooth transmitter to communicate with the base unit 100a or other devices within the piconet network 150).

Regarding claim 24, Cannon et al. disclose the system of claim 21 including a transmitter to transmit information over at least two different radio frequency networks as well as a telephone network (column 3, line 57- column 4, line 19).

Regarding claim 25, Cannon et al. disclose the device of claim 24 including a transmitter to transmit over a cellular telephone network and a Bluetooth network



(column 4, lines 12-19; the cellular telephone includes a transmitter to transmit over a cellular telephone network to another remote cellular telephone and a Bluetooth network to the base unit 100a and other devices 110-114 within the piconet network 150).

Regarding claim 27, Cannon et al. disclose the device of claim 21 including a receiver and a transmitter to implement a telephone link while simultaneously exchanging data received over a separate radio frequency link (column 3, line 32 – column 4, line 19).

Regarding claim 28, Cannon et al. disclose the device of claim 21 wherein said transmitter packetizes voice data (column 3, lines 32-52) (sending voice over a Bluetooth connection inherently involve packetization).

Regarding claim 29, Cannon et al. disclose the device of claim 28 wherein said transmitter packetizes enumeration data and transmits it with packetized voice data (column 3, lines 32-52) (enumeration data is necessary to send the packet to the correct device and therefore inherently a part of the packetized data).

Regarding claim 30, Cannon et al. disclose the device of claim 29 wherein said device is a Bluetooth and cellular transceiver (column 3, line 58 – column 4, line 19).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 13-20 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cannon et al. in view of Walley et al. (US Pub 2002/0090961).

Regarding claim 13, Cannon et al. disclose the article of claim 11 further storing instructions that enable the processor-based system to develop enumeration data for a plurality of devices in the first wireless piconet and communicate that enumeration data over the piconet network (column 3, lines 39-52). Cannon et al. do not disclose communicate that enumeration data over a non-radio frequency network. However, Walley disclose communicate enumeration data over a non-radio frequency network (paragraph [0028]-[0029] and figure 1; wherein two base units BS1 and BS2 are connected by a phone line 108). Therefore it would have been obvious for one having ordinary skill in the art at the time the invention was made to adapt the teaching of Walley et al. for connecting the two base unit with the telephone line to the article of Cannon et al. in order to extend the distance between the two base units.

Regarding claim 14, Walley et al. disclose the article of claim 13 further storing instructions that enable the processor-based system to develop communications about said first wireless piconet over a telephone network ([0028]-[0029]).

Regarding claim 15, Cannon et al. disclose the article of claim 11 further storing instructions that enable the processor-based system to receive enumeration data from a plurality of devices in a second wireless piconet coupled to said first wireless piconet by a radio frequency network (column 3, lines 32-38). Cannon et al. do not disclose storing instructions that enable the processor-based system to receive enumeration data from a plurality of devices in a second wireless piconet coupled to said first wireless piconet by

a non-radio frequency network. However, Walley et al. disclose storing instructions that enable the processor-based system to receive enumeration data from a plurality of devices in a second wireless piconet coupled to said first wireless piconet by a non-radio frequency network (paragraph [0028]-[0029] and figure 1; wherein two base units BS1 and BS2 are connected by a phone line 108). Therefore it would have been obvious for one having ordinary skill in the art at the time the invention was made to adapt the teaching of Walley et al. for connecting the two base unit with the telephone line to the article of Cannon et al. in order to extend the distance between the two base units.

Regarding claim 16, Walley et al. disclose the article of claim 15 further storing instructions that enable said processor-based system to combine said first and second wireless piconet enumeration data to develop a combined radio frequency network ([0056]).

Regarding claim 17, Cannon et al. and Walley et al. disclose the article of claim 16 further storing instructions that enable the processor-based system to enable any device in said first wireless piconet to communicate with any device in said second radio frequency network (see Cannon et al. column 3, lines 32-38 and Walley et al. [0035-0036]).

Regarding claim 18, Cannon et al. disclose the article of claim 17 further storing instructions that enable the processor-based system to transmit data from said first to said second wireless piconet via said call at the same time that a voice communication is ongoing between a device in said first wireless piconet and a device in said second

wireless piconet (using the cellular telephones between two piconet networks; column 4, line 12-19).

Regarding claim 19, Cannon et al. disclose the article of claim 18 further storing instructions that enable the processor-based system to implement cellular radio frequency communications (using the cellular telephones between two piconet networks; column 4, line 12-19).

Regarding claim 20, Cannon et al. disclose the article of claim 19 further storing instructions that enable said third device which is a cellular telephone in said first wireless piconet to act as a proxy for other devices in said first wireless piconet (using the cellular telephones between two piconet networks; column 4, line 12-19).

Regarding claim 26, Cannon et al. disclose the device of claim 21. Cannon et al. do not disclose wherein said processor is programmed to receive enumeration data over a non-radio frequency network so as to combine the first radio frequency network with a second radio frequency network over said non-radio frequency network. However, Walley et al. (figure 1) disclose processor is programmed to receive enumeration data over a non-radio frequency network ([0035-0036]) so as to combine the first radio frequency network with a second radio frequency network over said non-radio frequency networks ([0056]) (wherein two base units BS1 and BS2 are connected by a phone line 108). Therefore it would have been obvious for one having ordinary skill in the art at the time the invention was made to adapt the teaching of Walley et al. for combining and connecting the two base unit with the telephone line to the device of Cannon et al. in order to extend the distance between the two base units.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quochien B. Vuong whose telephone number is (571) 272-7902. The examiner can normally be reached on M-F 9:30-18:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on (571) 272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Quochien B Vuong/  
Primary Examiner, Art Unit 2618